

CLAIM

What is claimed is:

1. In a computing system having an application program executed by the computing system and displayed within an application window on a display of said computing system, said application program including application tools that are represented by application-tool buttons respectively that are to be displayed within a predefined application-tool area when desired, said computing system including a cursor to be displayed on said display when desired for indicating functioning and user's manipulation of a user-input device, a method comprising the steps of:

In response to receiving a user input from said user-input device,

Determining whether any of said application-tool buttons are displayed within said application-tool area,

When it is determined that there is no application-tool button displayed within said application-tool area: displaying a plurality of said application program's application-tool buttons within said application-tool area, causing said cursor to be displayed within said application-tool area, and browsing through said application-tool buttons when a cursor-movement input is received.

2. The method as set forth in Claim 1, wherein said application-tool area is a window, which is to be visible on said display when any of said application-tool buttons are displayed therein, said method further comprising the step of: when it is determined that there is at least one of said application-tool buttons displayed within said application-tool area and thus that the application-tool area window is visible on said display, hiding said application-tool area window.

3. The method of Claim 1, further comprising the step of: causing said cursor to be in a local mode such that movement of the cursor is restricted within said application-tool area.

4. The method as set forth in Claim 1, wherein said application-tool buttons are arranged in form of a virtual geometric shape so as to provide instructions for sequentially displaying said application-tool buttons within said application-tool area, whereby said virtual geometric shape is to be partially displayed within said application-tool area when desired, and wherein said step of browsing through comprises the step of:

In response to receiving a cursor-movement input for directing the cursor to move in a desired direction,

Determining whether there is substantial space for moving the cursor in said desired direction before the cursor encountering an external boundary of said application-tool area;

When it is determined that there is substantial space for moving the cursor in said desired direction before the cursor encountering the external boundary of said application-tool area, moving said cursor in said desired direction;

When it is determined that there is no substantial space for moving the cursor in said desired direction before the cursor encountering the external boundary of said application-tool area, scrolling said application-tool area's content displayed.

5. The method as set forth in Claim 4, wherein said application-tool buttons are arranged in such a way that said virtual geometric shape is a virtual rectangle such that said applications-tool buttons form a plurality of virtual rows and columns, and wherein said step of scrolling comprises the steps of:

Determining whether in said desired direction there is any virtually hidden application-tool buttons outside said application-tool area's boundary;

When it is determined that in said desired direction there is virtually hidden application-tool buttons outside said application-tool area's boundary, moving said hidden application-tool buttons into said application-tool area for display.

6. The method as set forth in Claim 5, wherein two opposite sides of said virtual rectangle are virtually attached to one another such that said virtual rectangular forms a virtual cylinder so as to provide continuous scrolling experience in a desired scrolling direction.

7. The method as set forth in Claim 1, 2, 3, 4, 5, or 6, wherein said application program is a spreadsheet or the like, a web browser or the like, a media player or the like, a word processor or the like, a CAD application or the like, an image editor or the like, an image viewer or the like, a motion-picture editor or the like, motion-picture viewer or the like, a web publishing application or the like, a document reader or the like, an Instant Messaging client or the like, an Instant-Messaging-related application or the like, an E-mail client or the like, or an E-mail-related application or the like.

8. The method as set forth in Claim 1, wherein said user-input device is a handheld remote-control device.

9. In a computing system having an expandable menu for display on a display of said computing system when desired and a cursor to be displayed on said display when desired for indicating functioning and user's manipulation of a user-input device, a method comprising the steps of:

In response to receiving a user input from said user-input device,

Displaying said menu in its expanded mode on said display such that a plurality of items included in said menu are displayed on said display; and

Causing said cursor to be visibly located on said expanded menu.

10. The method as set forth in claim 9, wherein said step of displaying is to be performed before said step of causing.

11. The method as set forth in claim 9, wherein said step of displaying is to be performed after said step of causing.

12. The method of claim 9, further comprising the step of: causing said cursor to be in a local mode such that movement of the cursor is restricted within the expanded menu displayed.

13. The method as set forth in Claim 9, 10, 11, or 12, wherein said user-input device is a handheld remote-control device.

14. In a computing system having a cursor for indicating functioning and user's manipulation of a user-input device and an expandable menu, said menu being displayed in its expanded mode on a display of said computing system such that a plurality of items included therein are displayed and are listed along a menu-expansion direction on said display, said cursor being visible on said display and being located within said expanded menu, a method comprising the steps of:

In response to a cursor-movement input from said user-input device for moving the cursor in a desired direction,

Determining whether there is substantial space for moving the cursor in said desired direction before the cursor encountering an external boundary of said expanded menu,

When it is determined that, there is substantial space for moving the cursor in said desired direction before the cursor encountering the external boundary of said expanded menu, moving said cursor in said desired direction;

When it is determined that, there is no substantial space for moving the cursor in said desired direction before the cursor encountering the external boundary of said expanded menu, navigating the item currently located by the cursor.

15. The method as set forth in Claim 14, wherein said item currently located by the cursor is an expandable submenu including a plurality of submenu items, and wherein said step of navigating comprises the step of:

Determining whether said desired direction is substantially perpendicular or parallel to said menu-expansion direction,

When it is determined that said desired direction is substantially perpendicular to said menu-expansion direction, expanding said submenu such that a plurality of submenu items included therein are displayed on said display, and moving said cursor to said expanded submenu.

16. The method of Claim 15, further comprising the step of: When it is determined that said desired direction is substantially parallel to said menu-expansion direction, maintaining said cursor's position near said external boundary of said expanded menu such that said cursor-movement input does not cause the cursor to move beyond said external boundary.

17. The method as set forth in Claim 14, wherein said item currently located by the cursor is not an expandable submenu and does not include any submenu item, and wherein said step of navigating comprises the step of: maintaining said cursor's position near said external boundary of said expanded menu such that said cursor-movement input does not cause the cursor to move beyond said external boundary.
18. The method as set forth in Claim 14, 15, 16, or 17, wherein said user-input device is a handheld remote-control device.
19. A method comprising the steps of:
In response to receiving a user input,
Displaying an display item within a predefined area on a display of a computer system, and
Causing a cursor of said computer system to be displayed within said predefined area on said display.
20. The method as set forth in Claim 19, wherein said step of displaying is to be performed before said step of causing.
21. The method as set forth in Claim 19, wherein said step of displaying is to be performed after said step of causing.
22. The method as set forth in Claim 19, wherein said display item includes a plurality of application-tool buttons of an application program executed by said computer system.
23. The method as set forth in Claim 19, wherein said display item is a pulled-down menu.